

Interview Summary	Application No.	Applicant(s)	
	09/882,949	KEKKI ET AL.	
	Examiner Richemond Dorvil	Art Unit 2654	

All participants (applicant, applicant's representative, PTO personnel):

(1) Richemond Dorvil. (3) _____.

(2) Arleen Neal (Reg. # 43828). (4) _____.

Date of Interview: 17 June 2004.

Type: a) Telephonic b) Video Conference
c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.
If Yes, brief description: _____.

Claim(s) discussed: All pending.

Identification of prior art discussed: Kapadia et al.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

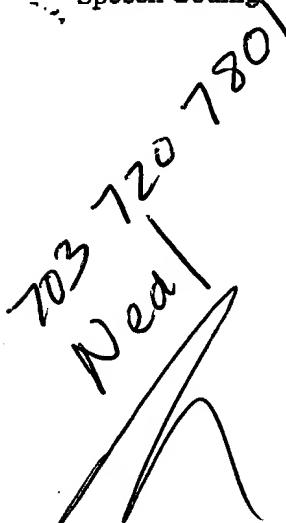
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Claim 1, as amended, distinguishes over Kapadia et al. because Kapadia et al. fail to disclose "converting speech parameters between a first speech coding method and a second speech coding method..." as recited in claim 1. Kapadia et al. disclose a first speech coder and a channel coder not a second speech coder therefore, Kapadia et al. fail to anticipate the claimed second speech coding method.

Speech Coding



Speech Coding

Dr. Andreas Spanias, Ted Painter, Sasan Ahmadi,
Khosro Darroudi and Hiren C. Bhagatwala,
Arizona State University (ASU)

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Introduction

What is Speech Coding?

"Speech Coding" is the term used for algorithms or devices whose purpose is to decrease the bit rate for transmission of a digital speech signal across a digital channel. This channel could be either a digital cellular channel, a satellite channel or the Internet. Development and widespread deployment of digital cellular and satellite communication systems during the last twenty years have brought increased attention to the role of speech coding in increasing the spectral efficiency of a digital communication system. In the literature, this part of the communication system as applied to speech transmission, has been called "Source Coding". As with all other coding systems, a speech coding algorithm has two primary parts, the "Encoder", located at the transmitting or the source end of the system, and a "Decoder", located at the receiving or the sink end of the system. The purpose of this WWW page is to give an idea of the workings of some speech coding algorithms and also demonstrate their applicability.

Demonstrations

[Demonstrations of Effects of Encoding/Decoding in Various Speech Codecs.](#)

Publications

- o Spanias, A.S., (October 94) [Speech Coding: A Tutorial Review](#).
- o Spanias, A.S. and Painter, E.M., [A Matlab Software Tool for the Introduction of Speech Coding Fundamentals in a DSP Course](#).
- o Ahmadi, S., and Spanias, A. S. (1996). [New Techniques for Sinusoidal Coding of Speech at](#)

Speech Coding

2400 BPS.

- o Ahmadi, S., and Spanias, A.S. (1996). Low-Bit Rate Speech Coding Based on Harmonic Sinusoidal Models.
- o Painter, E.M., and Spanias, A.S., "A MATLAB Software Tool for the Introduction of Speech Coding Fundamentals in a DSP Course."
- o Ahmadi, S., and Spanias, A.S. (1997). A New Sinusoidal Phase Modeling Algorithm.
- o Ahmadi, S., and Spanias, A.S. (1997). Low-Rate Sinusoidal Coding of Speech Using an Improved Phase Matching Algorithm
- o Darroudi, K. and Spanias, A.S. (1997) Robust Speech Coding Based on Pole-Zero Representations and Trellis Coded Quantization.

Research Group

The people associated with this research in speech coding at Arizona State University :

Dr. Andreas Spanias, Principal Investigator

Sassan Ahmadi

Ted Painter

Khosro Darroudi

Hiren C Bhagatwala

Affiliations

Other sites related to this project include the following:

Speech and Audio Processing Lab

Digital Signal Processing Lab

Telecommunications Research Center

College of Engineering and Applied Sciences

Arizona State University, Tempe, Arizona 85287-7206 USA

Contacts

Direct all correspondence to:

Dr. Andreas S. Spanias <spanias@asu.edu>

Last Updated on August 3, 1997 by Hiren C Bhagatwala